

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
12 December 2002 (12.12.2002)

PCT

(10) International Publication Number
WO 02/098816 A1

- (51) International Patent Classification⁷: **C04B 28/14.** (24/26)
- (21) International Application Number: **PCT/CA02/00812**
- (22) International Filing Date: 3 June 2002 (03.06.2002)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/295,011 4 June 2001 (04.06.2001) US
- (71) Applicant (*for all designated States except US*):
WALKER INDUSTRIES HOLDING LIMITED [CA/CA]; P.O. Box 100, 2800 Townline Road, Thorold, Ontario L2V 3Y8 (CA).
- (72) Inventor; and
- (75) Inventor/Applicant (*for US only*): **SINNIGE, Laurence, Anthony** [CA/CA]; 69 Niagara on the Green Boulevard, SS4, Niagara-on-the Lake, Ontario L0S 1J0 (CA).
- (74) Agents: **CHARI, Santosh, K.** et al.; Orange & Chari, Suite 4900, P.O. Box 190, 66 Wellington Street West, Toronto-Dominion Bank Tower, Toronto, Ontario M5K 1H6 (CA).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
 before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 02/098816 A1

(54) Title: WAX EMULSION FORMULATION AND GYPSUM COMPOSITION CONTAINING SAME

(57) Abstract: An aqueous emulsion for imparting water repellency characteristics to gypsum products comprising: a) a hydrocarbon wax; b) a polyolefin-maleic anhydride graft polymer; and c) a polyvinyl alcohol composition comprising partially and/or fully hydrolyzed polyvinyl acetate. The emulsion may also contain other known ancillary components such as emulsifiers and stabilizers.